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United States Patent [19][11] **Patent Number:** **5,970,976****Zhao**[45] **Date of Patent:** **Oct. 26, 1999**

[54] **APPARATUS AND METHOD FOR
GENERATING PRESSURE CHANGES IN A
MAMMALIAN ORAL/THROAT CAVITY**

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600/529

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600/529, 543

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[57] **ABSTRACT**

Predetermined pressure changes in the oral and throat cavity is achieved by inducing at least a partial vacuum in the mouth and throat area of a mammal in temporal coordination with the mammal's breathing pattern. The partial vacuum is selectively applied to the mouth and throat cavity only during inhalation cycles of the breathing pattern. A further aspect of the invention provides for additionally inducing a positive or atmospheric pressure in the mouth and throat cavity only during exhalation cycles of the breathing pattern.

12 Claims, 3 Drawing Sheets

